

Vermont DEC- Intermittent stream channel culvert sizing guidance.

Culvert sizing on any intermittent stream is based on the active channel width of the stream.

Active Channel definition: **The active channel is considered the width of the stream measured perpendicular to streamflow. The active channel is the limits of the streambed scour formed by prevailing stream discharges, it is narrower than the bankfull width (approximately 75%) and is defined by the break in bank slope and is also typically the edge of permanent vegetation.**

Intermittent Stream Drainage Area Sizing table:

| Drainage Area Acres | Culvert Size (inches) |
|------------------------|-------------------------------------|
| 5 | 15.0Min Drive Culvert Size |
| 8 | 18.0Min Cross Culvert Size |
| 20 | 30.0 |
| 40 | 36.0 |
| 50 | 42.0 |
| 80 | 48.0 |
| 100 | 54.0 |
| 150 | 66.0 |
| 200 | 72.0 |
| 250 | 78.0 |
| 300 | 84.0 |
| 320 | Defined Perennial Stream VTSAGP. |
| 350 | |
| 450 | |
| 550 | |
| 640 | |

Notes:

- 1.) Field measured active channel width is always preferred to sizing based on the drainage area alone. The drainage area sizing is recommended as a check on field measurements. If field measurements are not available, the drainage area sizing is acceptable.
- 2.) There are many perennial streams below the 320 acre (0.5 mi²) level but this is used as a placeholder to determine where a SA permit will be REQUIRED. Any stream related questions can be referred to the appropriate regional River Management Engineer.